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ABSTRACT

A study was conducted to determine the appropriateness of the Concept Mastery Test for graduate students enrolled in an introductory research methodology course. Ss represented a cross-section of students entering a master's program at a large southeastern university. The Concept Mastery Test (CMT), the Nelson-Denny Reading Test (ND), and the Otis-Lennon Mental Ability Test, Advanced Level (OLMAT) were administered. Graduate grade point averages (GGPA) were also collected. The correlation between the ND vocabulary and comprehension subtests was .40, indicating considerable independence. The correlation between the synonyms and antonyms and analogies subtests of the CMT was .64, indicating much less independence. Correlations between GGPA and the CMT and OLMAT tests ranged from .03 to -.18. Relationships between CMT and other tests ranged from -.2 to .58. (KM)

The Appropriateness of the Concept
Mastery Test for Graduate Students

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The 1956 Manual accompanying the Concept Mastery Test (CMT) states:

"The Concept Mastery Test (CMT) is a measure of ability to deal with abstract ideas at a high level. It is suitable for administration to college juniors or seniors and to graduate students." (Terman, 1956). The 1972 Test Catalogue published by The Psychological Corporation states that the "Range" for CMT is "Upper Level undergraduates, graduate students, and adult candidates for research, executive, and other unusually demanding jobs." (The Psychological Corporation, 1972).

The present study was designed to determine the concurrent appropriateness of the Concept Mastery Test for graduate students enrolled in an introductory research methodology course.

Procedures

The subjects for the present study were graduate students enrolled in Introduction to Methods of Research, a course designed for beginning master's level students. The group represented a reasonably good cross section of students entering a master's program of studies at a large university in the southeast. The subjects were administered the Concept Mastery Test (CMT), the Nelson-Denny Reading Test (ND), and the Otis-Lennon Mental Ability Test, Advanced Level (OLMAT). The CMT contains two subtests, synonyms and antonyms (CM-SA) and Analogies (CM-A). The ND is designed to assess adult reading

Table 1
Raw Scores, Means and Standard Deviations
(N = 102)

	M	SD
Graduate GPA* (GGPA)	3.67	.33
Concept Mastery Test		
Synonyms and Antonyms (CM-SA)	57.21	20.44
Analogies (CM-A)	40.56	11.23
Total (CM-T)	97.77	26.18
Nelson-Denny Reading Test		
Vocabulary (ND-V)	46.11	15.34
Comprehension (ND-C)	33.49	16.03
Total Score (ND-T)	79.60	25.89
Otis-Lennon Mental Ability Test (OLMAT)	58.26	13.15

*Grade Point Average

ND-V vs. ND-C = .40

CM-SA vs. CM-A = .54

Table 2
Relationships Among Grade Point Averages
and Certain Standardized Measures (N = 102)

	GGPA	ND-V	ND-C	ND-T	OLMAT
CM-SA	-15	51	-02	33	21
CM-A	-18	60	28	67	38
CM-T	-18	62	09	67	58
OLMAT	03	62	48	67	

*Decimals Omitted.

ability by two subtests, Vocabulary (ND-V) and Comprehension (ND-C). Graduate Grade Point Averages (GGPA) were collected for each subject.

Means, standard deviations, and zero order intercorrelations among all measures were obtained.

Results and Discussion

Table 1 presents the means and standard deviations for all measures.

The correlation between ND-V and ND-C was .40. This relationship indicates considerable independence of the two subtests. The correlation between CM-SA and CM-A was .64. This relationship was expected and does not show nearly as much independence of subtests as in the case of ND subtests.

Table 2 presents relationships among graduate grade point average and certain standardized measures. The correlations between GGPA and CM-SA, CM-A, CM-T, and OLMAT ranged from .03 to -.18 (not significantly different from .00 at the .01 level of significance). The relationships between CM and ND-C (-.02, .28, .09), CM and OLMAT (.21, .38, .58), and CM-SA and ND-T (.33) were surprisingly low. Other correlations presented in Table 2 are reasonably close to ones reported in other literature.

References

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